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No Reply
PCT
28 SEP 2004

To: TIMOTHY J. KING
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PCT

~~28 SEP 2004~~

(PCT Rule 66)

		Date of Mailing (day/month/year)	08 JAN 2004
Applicant's or agent's file reference 200200006 PCT		REPLY DUE within 2 months/days from the above date of mailing	
International application No. PCT/US03/04165	International filing date (day/month/year) 11 February 2003 (11.02.2003)	Priority date (day/month/year) 20 December 2002 (20.12.2002)	
International Patent Classification (IPC) or both national classification and IPC IPC(7): B01D 35/34 and US Cl.: 210/232, 440, 443, 444, 452, 454, 497.01, 493.1			
Applicant MYKROLIS CORPORATION			

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.
- When?** See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).~~
- How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.
- Also** For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 *bis*.
For an informal communication with the examiner, see Rule 66.6
- If no reply is filed**, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 20 April 2005 (20.04.2005).

Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer Matthew O Savage Telephone No. 703-308-0661	Jean Proctor Paralegal Specialist
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Form PCT/IPEA/408 (cover sheet)(July 1998)

United States US 11/2/04
 of the State
 Number (3) _____
 Date: Personal to W O

I. Basis of the opinion

1. With regard to the elements of the international application:*

- ☒ the international application as originally filed
- ☒ the description:
 pages 1-7, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.
- ☒ the claims:
 pages 8-10, as originally filed
 pages NONE, as amended (together with any statement) under Article 19
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.
- ☒ the drawings:
 pages 1-10, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.
- ☐ the sequence listing part of the description:
 pages NONE, as originally filed
 pages NONE, filed with the demand
 pages NONE, filed with the letter of _____.

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
 These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. STATEMENT

Novelty (N)	Claims <u>2, 3, 5-13, and 15-17</u>	YES
	Claims <u>1, 4, and 14</u>	NO
Inventive Step (IS)	Claims <u>5-13, and 15-17</u>	YES
	Claims <u>1-4 and 14</u>	NO
Industrial Applicability (IA)	Claims <u>1-17</u>	YES
	Claims <u>NONE</u>	NO

2. CITATIONS AND EXPLANATIONS

Please See Continuation Sheet

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

TIME LIMIT:

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

V. 2. Citations and Explanations:

Claim 14, 16, and 17 lack novelty under PCT Article 33(2) as being anticipated by Koelfgen.

With respect to claim 14, Koelfgen discloses an elongated filter medium 86 having a first end and a second end, a plate 82 having at least two flanges 110 formed integrally therewith and extending outwardly, sealed to the first end, the first end cap having two flanges 110 formed integrally therewith, a fluid passageway 92 extending through the plate, the plate being shaped to be sealed to an end of the filter medium to that the flanges extend outwardly from a vertical surface of the filter cartridge.

With respect to claim 16, Koelfgen discloses a bowl 60, a collar secured to an open end of the bowl, the collar including at least two slots 112 through the thickness thereof.

As to claim 17, Koelfgen discloses the bowl and collar as being of unitary construction.

Claims 1, and 3-7 lack an inventive step under PCT Article 33(3) as being obvious over Koelfgen in view of Briggs.

With respect to claim 1, Koelfgen discloses an elongated filter medium 86 having a first end and a second end, a first end cap 82 sealed to the first end, the first end cap having two flanges 110 formed integrally therewith, the flanges extending outward from an outer vertical surface of the filter medium, a second end cap 84 sealed to the second end, and a fluid passageway 92 sealed to the first end cap plate to provide fluid communication with the open interior within the filter medium. Koelfgen fails to specify the fluid porous housing. Briggs discloses the concept of providing a fluid porous housing 10 for a filter element and suggests that the housing provides additional support and protection for the filter media. It would have been obvious to have modified the filter of Koelfgen so as to have included the fluid porous housing as suggested by Briggs in order to provide additional support and protection for the filter media.

Concerning claim 3, Briggs discloses a pleated filter 16.

With respect to claim 4, Koelfgen discloses a manifold 29 and a bowl 60 which houses a filter cartridge 80, and means 66 for locking the bowl to the manifold, the filter cartridge including an elongated filter medium 80 having a first end and a second end, a first end cap 82 sealed to the first end, the first end cap having two flanges 110 formed integrally therewith, the flanges extending outward from an outer vertical surface of the filter medium, a second end cap 84 sealed to the second end, and a fluid passageway 92 sealed to the first end cap plate to provide fluid communication with the open interior within the filter medium, the cartridge and bowl being in fluid communication with the manifold in a manner that prevents mixing of a fluid feed to the cartridge with a permeate removed from the cartridge. Koelfgen fails to specify the fluid porous housing. Briggs discloses the concept of providing a fluid porous housing 10 for a filter element and suggests that the housing provides additional support and protection for the filter media. It would have been obvious to have modified the filter of Koelfgen so as to have included the fluid porous housing as suggested by Briggs in order to provide additional support and protection for the filter media.

Concerning claim 5, Koelfgen discloses a bowl having an upper part that forms a collar, the bowl and collar being of unitary

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

construction.

As to claim 6, Koelfgen includes an inlet 26.

Regarding claim 7, Koelfgen includes an inlet 26 and an outlet 22

Claim 2 lacks an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraph and further in view of Swanson et al.

With respect to claim 2, Koelfgen and Briggs fail to specify a depth filter medium. Swanson et al discloses a depth filter medium and suggests that such a medium is capable of providing secondary filtration of oil of a diesel engine. It would have been obvious to have modified the combination suggested by Koelfgen and Briggs so as to have included a depth filter medium as suggested by Swanson et al in order to provide secondary filtration for a diesel engine.

Claims 8-13, and 15 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest: The limitation of the flanges having a boss on an outside surface of each of the flanges as recited in claims 8, 10, 12, 13, and 15;

The limitation of the flanges having a groove on the lower surface of the flanges as recited in claims 9 and 11.

Claims 1-17 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

----- NEW CITATIONS -----